AMENDMENTS TO THE CLAIMS

Please amend claim 1 as follows and cancel claim 3 without prejudice.

1. (Currently Amended) A multi-rate transmission apparatus in which a coding ratio is varied in accordance with an input modulation operation mode to allow a transmission operation with a single input clock signal for any input modulation mode, comprising:

data processing means for reading in data having a bit width suitable for a modulation system corresponding to the input modulation mode;

coding means for performing coding processing parallely for the data read in by said data processing means; and

transmission means for transmitting the data, for which the coding processing has been performed, in accordance with the modulation system and the varied coding ratio,

wherein said coding means includes:

a register set for storing data of n-bit strings, n being a natural number;

a plurality of convolution coding circuits for fetching the data of n-bit strings from said register set and performing convolution processing for the data of n-bit strings in a unit of n-bit strings fixed;

a puncture circuit for performing puncture processing for coding results outputted from said plurality of convolution coding circuits and outputting coded data; and

a data discrimination circuit for discriminating bits corresponding to the coded data outputted from said puncture circuit.

2. (Original) A multi-rate transmission apparatus as claimed in claim 1, wherein said data processing means includes:

a transmission memory for storing transmission data of m-bit strings where m is a natural number and varies in accordance with the modulation system;

means for assembling the data of m-bit strings into data of n-bit strings fixed to be used for coding processing, n being a natural number; and

a memory for temporarily storing the data of n-bit strings.

3. (Cancelled).

4. (Original) A multi-rate transmission apparatus as claimed in claim 1, wherein said transmission means includes:

a transmission control circuit for determining a transmission timing;

a modulation data allocation circuit for allocating the coded data to modulation data; and

a transmission circuit for transmitting the modulation data at a clock timing from said transmission control circuit.